Amendments to the Specification:

Please replace the paragraph beginning on page 5, line 1, of the specification with the following amended paragraph:

The present invention provides a method for automatically limiting the duty cycle of a disk drive in order to avoid exceeding its intended usage which can lead to premature disk drive failure. Figure 1 illustrates a basic block diagram of components of a disk drive system included in the present invention. In general, disk drives 10 employ a microprocessor-based interface controller 12 that accepts read/write commands from a host system 14, such as a host adapter or RAID controller of a processing system, interprets those commands, activates a disk seek mechanism to position a read/write head over the desired data area on a disk ~~14~~ 16, and controls the transfer of the data to/from the disk 16 media and the host system 14. The controller 12 typically has some kind of timer capability that is used to keep track of time for performing time-outs on internal disk drive operation and for generating time-stamps on error log entries, for example. Implementation of the present invention suitably occurs as an algorithm in the embedded firmware program (on a suitable computer readable medium) that executes on the controller 12 that controls overall operation of the disk drive 10. Since each disk drive 10 can have a different rating for maximum duty cycle, the invention allows for a general self-limiting algorithm that can have control parameters that can be customized for each individual model of disk drive that employs the invention.

Please replace the paragraph beginning on page 7, line 8, of the specification with the following amended paragraph:

In performing the limiting of the self-limiting algorithm, each time a read/write command is received by the disk drive 10 (step 23 is affirmative), the controller 12 checks T to see if the value is positive or negative (via step 24). If positive, the disk state is set to busy (step 28) and then the disk drive 10 can begin to perform the requested command (step 29); if negative or zero, then the disk drive 10 remains idle and delays processing of the new command until T is set to a positive number by the subsequent addition of N to the count value at the end of a future time period. As soon as the value of T is positive, command processing should begin. When the command is not yet completed (as determined via step ~~20~~ 30), and 1 ms has elapsed since T was updated (determined via step 31), the disk drive 10 should decrement T by the value of M-N at the end of each successive time period (step 32). Once the command has been completed and the disk drive 10 enters the idle state, T should again be incremented by N at the end of every subsequent time period until another command is received. If this process is performed continually, the disk drive will automatically limit its duty cycle over the long term to the desired value.